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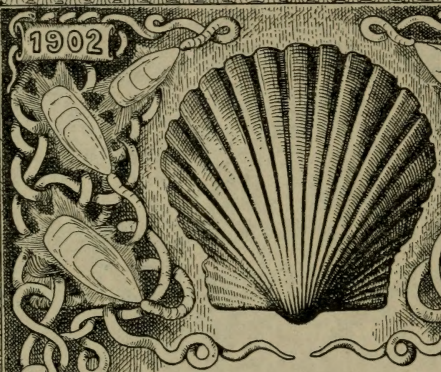
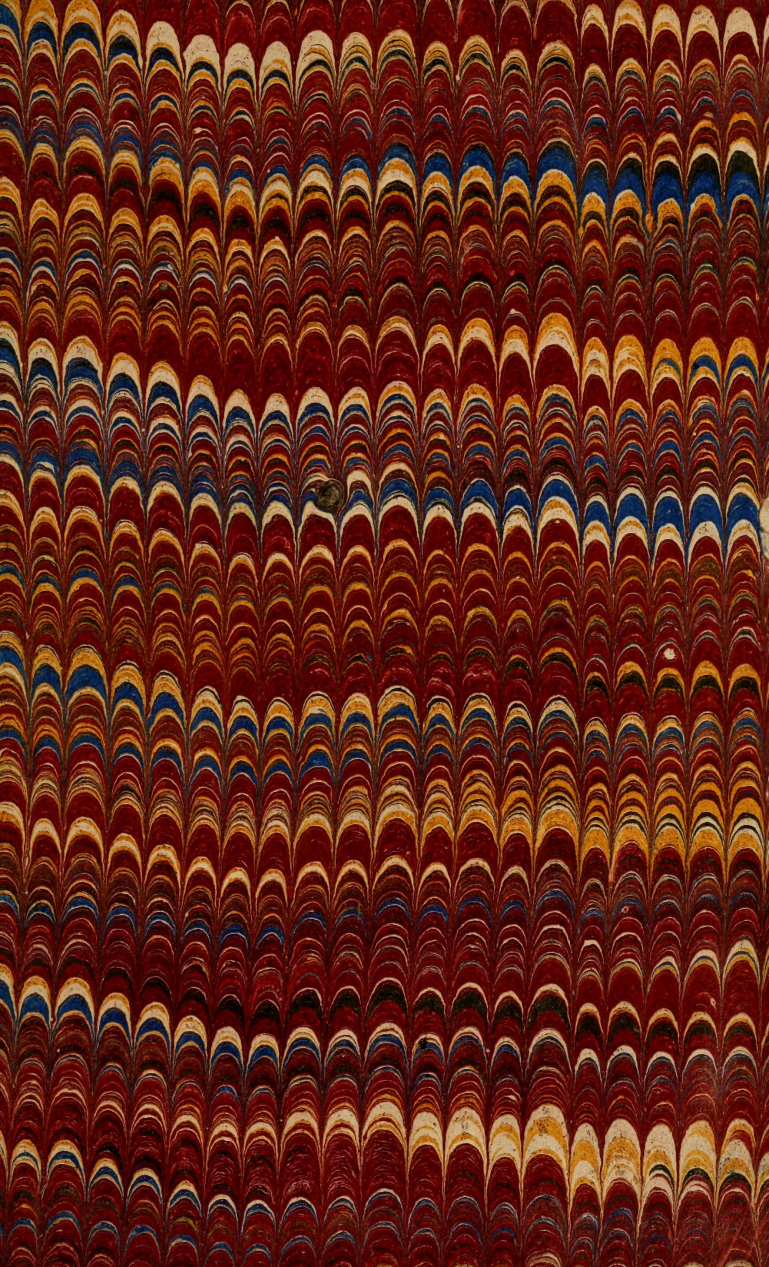


Ex libris

William Healey Dall.



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GEOLOGICAL SURVEY OF CALIFORNIA.

J. D. WHITNEY, STATE GEOLOGIST.

CATALOGUE

Division of Mollusks
Sectional Library

OF THE

INVERTEBRATE FOSSILS

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A. TERTIARY.

The following is intended merely as a check list, and for labels; supplementing the "Geographical Catalogue of Mollusca," published in 1867. As full details of the distribution of the species are given in Vol. II of the Palæontology, it is unnecessary at present to add this to the catalogue; especially as every new collection shows that the subject is still far from being thoroughly worked up.

Some of the older species, not positively recognized in the Survey Collections, are referred with a ? to the numbers of the "Geographical Catalogue," with which they are supposed, by Messrs. Gabb, Carpenter, or Cooper, to be probably identical. To prevent confusion of numbers, the extinct Tertiary commence with 1000. The order is changed from the Synopsis in Vol. II, to agree with the "Geographical Catalogue."

POST-PLIOCENE.

The following are the numbers of living species found fossil only in the post-pliocene: — 5, 8?, 14, 19, 26, 39, 44, 51, 56, 67, 68, 72, 75, 76, 80, 86, 88, 89, 90, 91, 95, 98, 104, 109, 114, 120, 123, 124, 132, 134, 135, 142, 175, 189, 195, 200, 206, 207? 209, 210, 213, 214, 215, 217, 218, 219, 220, 221, 231, 232, 289, 296, 299, 302, 314, 329, 405, 406, 442, 448, 449, 451, 452, 453, 457, 461, 463, 465, 466, 469, 470, 472, 475, 477, 479, 480, 481, 482, 483, 489, 491, 495, 496, 497, 498, 499, 501? 503, 507, 514, 515, 517, 518? 525, 526, 530, 531, 534, 539, 541, 542, 547, 549, 558, 559, 572, 581, 623, 631, 632, 633, 634, 640, 642, 645, 655, 664, 693, 694, 695, 698, 712, 714, 722, 724, 725, 732, 733, 736, 737, 738, 739, 740, 742, 744, 746, 747, 751, 756, 759, 760, 763? 772, 774, 776, 777? 778, 779, 780, 781, 784, 787, 788.

Living S., 1023, 1051, 1061, 1090, 1171.

Living N., 1091, 1181.

The following extinct species are post-pliocene only: 1000, 1002? 1004? 1007, 1009? 1034, 1057? 1062, 1071? 1091, 1112, 1113? 1127? 1147? 1148? 1151, 1153, 1162? 1180, 1182, 1186, 1197, 1198? 1199.

PLIOCENE.

The following extend back into the pliocene :—24, 29, 41, 48, 53, 100, 117, 119, 131, 140, 172, 176, 204, 212, 224, 226, 500, 528, 529, 532, 533, 548, 639, 658, 715, 723, 730, 731, 735, 749, 783, 1003, 1014, 1024, 1031, 1039, 1046, 1051, 1056, 1058, 1060, 1066, 1076, 1100, 1107, 1108, 1109, 1114, 1115, 1119, 1126, 1143, 1144, 1145, 1154, 1160, 1166, 1178, 1188, 1189, 1202, 1207, 1209, 1210.

Perhaps Pliocene : — 290, 572? 1005, 1006, 1030, 1033, (= 1039?) 1048.

Perhaps Miocene : — 1038, 1068, 1072, 1075, 1079, 1097, 1102, 1103, 1110, 1117.

Of doubtful Tertiary age : — 1011, 1017, 1020, 1059, 1067, 1086, 1141, 1142, 1167, 1168.

MIOCENE,

AND ALSO PLIOCENE.

20, 23, 41, 42, 45, 49, 50, 52, 55, 62, 67?, 81, 82, 83, 84, 96, 99, 102, 108, 119, 130, 138, 179, 180, 193, 194, 553, 717, 734, 750, 814, 1010, 1028, 1074, 1077, 1081, 1087, 1105, 1161, 1179.

The rest are Miocene only.

CORRECTIONS.

1016*a* **Macoma Pedroana** *Con.* = gemma *Gld* ?

1027*a* **Schizodesma abscissa** *Gabb.*

1022 For *Car.* read *Con.*

1023 For *Car.* read *Cpr.*, and *add*, Living, S.

1162 *Add*, Living, S.

2069 For *raricosta* read **raricostata** *Gabb.*

I. EXTINCT MOLLUSCA.

L. C., Lower California. N., S., now living north or south of California.

1000 **Morrisia Hornii** *Gabb.*

1001 **Terebratula nitens** *Con.*

1002 **Zirphœa Gabbi** *Tryon.* = 13 ?

1003 **Zirphœa dentata** *Gabb.*

1004 **Saxicava abrupta** *Con.* = 113 ?

1005 **Mya Montereyana** *Con.* = 32 ?

1006 **Mya subsinuata** *Con.* = 53 ?

1007 **Corbula Diegoana** *Con.*

1008 **Pandora scapha** *Gabb.*

1009 **Pandora bilirata** *Con.* = 31 ?

1010 **Thracia trapezoides** *Con.*

1011 Thracia mactropsis *Con.*

1012 Solen protextus *Con.*

1013 Solen curtus *Con.*

1014 Siliquaria edentula *Gabb.*

1015 Macoma Ocoyana *Con.*

1016 Macoma arctata *Con.* = 55 ?

1017 Tellina Diegoana *Con.*

1018 Tellina obruta *Con.*

1019 Tellina albaria *Con.*

1020 Tellina bitruncata *Con.*

1021 Tellina congesta *Con.* = 79 ?

1022 Arcopagia unda *Car.* = 67 ?

1023 Lutricola viridotincta *Car.*

1024 Gari alata *Gabb.*

1025 Hemimactra lenticularis *Gabb.*

1026 Hemimactra occidentalis *Gabb.*

1027 Mulinia densata *Con.*

1028 Pseudocardium Gabbi *Rem.*

1029 Mactra Gabiotensis *Con.*

1030 Lutraria transmontana *Con.*

1031 Caryatis Barbarensis *Gabb.*

1032 Pachydesma Inezana *Con.*

1033 Venus Pajaroensis *Con.*

1034 Mercenaria perlaminosa *Con.* = 93 ?

1035 Meretrix Traskii *Con.*

1036 Meretrix uniomeris *Con.*

1037 Meretrix decisa *Con.*

1038 Meretrix Tularana *Con.*

1039 **Callista Voyi** *Gabb.*

1040 **Chione Mathewsonii** *Gabb.*

1041 **Chione Whitneyi** *Gabb.*

1042 **Chione pertenuis** *Gabb.*

1043 **Chione Oregona** *Con.*

1044 **Chione angustifrons** *Con.*

1045 **Chione vespertina** *Con.*

1046 **Tapes Staleyi** *Gabb.*

1047 **Tapes truncata** *Gabb.*

1048 **Tapes montana** *Con.* = 87 ?

1049 **Tapes Inezensis** *Con.* = 108 ?

1050 **Dosinia Conradi** *Gabb.*

1051 **Dosinia ponderosa** *Gray.* Living S.

1052 **Dosinia Mathewsonii** *Gabb.*

1053 Dosinia longula *Con.*

1054 Dosinia montana *Con.*

1055 Dosinia subobliqua *Con.*

1056 Saxidomus gibbosus *Gabb.*

1057 Petricola Pedroana *Con.*

1058 Cyrena Californica *Gabb.* (Prime?)

1059 Cardium modestum *Con.* = 121 ?

1060 Cardium Meekianum *Gabb.*

1061 Cardium Panamense *Sby.* Living S.

1062 Conchocele disjuncta *Gabb.*

1063 Conchocele bisecta *Con.*

1064 Crassatella collina *Con.*

1065 Mysia parilis *Con.*

1066 Lucina Richthofeni *Gabb.*

1067 **Lucina fibrosa** *Shum.*

1068 **Lucina permacra** *Con.* = 138?

1067 **Lucina Estrellana** *Con.* = 138?

1070 **Mytilus Mathewsonii** *Gabb.*

1071 **Mytilus Pedroanus** *Con.* = 173j?

1072 **Mytilus Inezensis** *Con.*

1072 **Modiola contracta** *Con.*

1074 **Modiola multiradiata** *Gabb.*

1075 **Perna montana** *Con.*

1076 **Arca sulcicosta** *Gabb.*

1077 **Arca microdonta** *Con.*

1078 **Arca devincta** *Con.*

1079 **Arca Obispoana** *Con.*

1080 **Arca congesta** *Con.*

1081 Axinea patula *Con.*

1082 Neilo abrupta *Con.*

1083 Leda Oregona *Shum.*

1084 Leda Willamettensis *Shum.*

1085 Leda penita *Con.*

1086 Yoldia nasuta *Gabb.*

1087 Yoldia impressa *Con.* = 201 ?

1088 Limopsis nitens *Con.*

1089 Limopsis Oregonensis *Con.*

1090 Pecten ventricosus *Sby.* Living S.

1091 Pecten Cerrosensis *Gabb.* L. C.

1092 Pecten propatulus *Con.* = 212 ?

1093 Pecten catilliformis *Con.*

1094 Pecten Pabloensis *Con.*

1095 **Pecten Peckhami** *Gabb.*

1096 **Pecten Pedroanus** *Trask.*

1097 **Pecten Meekii** *Con.*

1098 **Pecten Islandicus** *Mull.* Living N.

1099 **Pecten Coosensis** *Shum.*

1100 **Pecten Deserti** *Con.*

1101 **Pecten Nevadanus** *Con.*

1102 **Pecten discus** *Con.*

1103 **Pecten Magnolia** *Con.*

1104 **Liropecten Estrellanus** *Con.*

1105 **Liropecten crassicardo** *Con.*

1106 **Liropecten volæformis** *Con.*

1107 **Liropecten Veatchii** *Gabb.*

1108 **Janira bella** *Con.*

1109 **Ostrea Bourgeoisii** *Rem.*

1110 **Ostrea Attwoodii** *Gabb.*

1111 **Ostrea Tayloriana** *Gabb.*

1112 **Ostrea Veatchii** *Gabb.* L. C.

1113 **Ostrea Cerrosensis** *Gabb.* (= O. gallus ?)

1114 **Ostrea vespertina** *Con.*

1115 **Ostrea Heermanni** *Con.*

1116 **Ostrea Titan** *Con.*

1117 **Ostrea subjecta** *Con.*

1118 **Ostrea Panzana** *Con.*

1119 **Anomia subcostata** *Con.*

1120 **Tamiosoma gregaria** *Con.*

1121 **Bulla jugularis** *Con.*

1122 **Tornatella elliptica** *Trask.*

1123 **Cylichna Oregona** *Con.*

1124 **Cylichna petrosa** *Con.*

1125 **Dentalium substriatum** *Con.*

1126 **Acmæa rudis** *Gabb.*

1127 **Cemoria crucibuliformis** *Con.* = 468?

1128 **Packypoma biangulata** *Gabb.*

1129 **Vanikoro? Diegoana** *Con.*

1130 **Crepidula rostralis** *Con.*

1131 **Hipponyx "Grayanus** *Mke."* = 541.

1132 **Trochita Diegoana** *Con.*

1133 **Trochita costellata** *Con.*

1134 **Trochita filosa** *Gabb.*

1135 **Trochita inornata** *Gabb.*

1136 **Turritella variata** *Con.*

1137 **Turritella Inezana** *Con.*

1138 **Turritella Ocoyana** *Con.*

1139 **Turritella Hoffmani** *Gabb.*

1140 **Mesalia arenicola** *Con.*

1141 **Melania Taylori** *Gabb.*

1142 **Lithasia antiqua** *Gabb.*

1143 **Littorina Remondii** *Gabb.*

1144 **Surcula Tryoniana** *Gabb.*

1145 **Drillia Voyi** *Gabb.*

1146 **Pleurotoma transmontana** *Con.*

1147 **Clathurella Conradiana** *Gabb.*

1148 **Chemnitzia papillosa** *Trask.* = 670 ?

1149 **Cerithiopsis Oregonensis** *Con.*

1150 **Cancellaria Oregonensis** *Con.*

1151 **Cancellaria tritonidea** *Gabb.*

1152 **Cancellaria vetusta** *Gabb.*

1153 **Cancellaria gracilior** *Cpr.*

1154 **Cancellaria altispira** *Gabb.*

1155 **Natica geniculata** *Con.*

1156 **Lunatia Oregonensis** *Con.*

1157 **Neverita saxea** *Con.*

1158 **Neverita callosa** *Gabb.*

1159 **Sigaretus scopulosus** *Con.*

1160 **Sigaretus planicostum** *Gabb.*

1161 **Volutilithes indurata** *Con.*

1162 **Ranella triquetra** *Cpr.*

1163 **Ranella Mathewsonii** *Gabb.*

1164 **Ancillaria Fishii** *Gabb.*

1165 **Olivella Pedroana** *Con.* = 733?

1166 **Columbella Richthofeni** *Gabb.*

1167 **Purpura petrosa** *Con.*

1168 **Galeodea petrosa** *Con.*

1169 **Cassidea? petrosa** *Con.* = 1168?

1170 **Cassidea? bilirata** *Con.*

1171 **Monoceros lugubris** *Sby.* Living S.

1172 **Cuma biplicata** *Gabb.*

1173 **Metula Remondii** *Gabb.*

1174 **Agasoma gravida** *Gabb.*

1175 **Agasoma sinuata** *Gabb.*

1176 **Ficopsis modesta** *Con.*

1177 **Ficus Ocoyanus** *Con.*

1178 **Ficus pyriformis** *Gabb.*

1179 **Ficus nodiferus** *Gabb.*

1180 **Pisania fortis** *Cpr.*

1181 **Murex fragilis** *Trask.* = 779. Living N.

1182 **Muricidea paucivaricata** *Gabb.*

1183 **Muricidea foveolata** *Hds.* Living.

1184 **Muricidea perita** *Hds.* = 777 ? Living.

1185 **Trophon ponderosus** *Gabb.*

1186 **Trophon tenuisculptus** *Cpr.*

1187 **Neptunea recurva** *Gabb.*

1188 **Neptunea altispira** *Gabb.*

1189 **Neptunea humerosa** *Gabb.*

1190 **Busycon Oregonensis** *Con.*

1191 **Priscofusus arctatus** *Con.*

1192 **Priscofusus corpulentus** *Con.*

1193 **Priscofusus devinctus** *Con.*

1194 **Priscofusus medialis** *Con.*

1195 **Priscofusus nodiferus** *Con.*

1196 **Priscofusus Oregonensis** *Con.*

1197 **Fusus Barbarensis** *Trask.*

1198 **Fusus robustus** *Trask.* = 787?

1199 **Fusus rugosus** *Trask.* = 787? Living.

1200 **Triptera clavata** *Gabb.*

1201 **Aturia zigzag** *Con.*

II. CRUSTACEA.

1202 **Cancer Brewerii** *Gabb.*

III. RADIATA.

1203 Clypeaster Gabbi *Rem.*

1204 Echinarachnius Brewerianus *Rem.*

1205 Scutella Gibbsii *Rem.*

1206 Scutella striatula *Con.* Living.

1207 Scutella interlineata *Stimp.*

1208 Astrodapsis Antiselli *Con.*

1209 Astrodapsis Whitneyi *Rem.*

1210 Astrodapsis tumidus *Rem.*

1211 Asterias Remondi *Gabb.*

1212 Galerites Oregonensis *Dana.*

CRETACEOUS MOLLUSCA.

A check list of the cretaceous species described or mentioned in "Palæontology," Vol. I, was published some years since by Mr. Gabb. The present list contains the additional names published in Vol. II, including several from near Arivechi, Sonora, Mex. These may yet be found in Arizona, as most of them are in Texas.

To avoid confusion, the numbers commence with 2000. To correspond with the Catalogue in Vol. II, the order followed with the living and tertiary species is here reversed.

I. Described in Vol. I under another name. M. Mexico.

2000 Ptiloleuthis foliatus *Gabb.*

2004 Nautilus Campbellii *Meek.*

2014 **Ammonites Tehamaensis** *Gabb.* I.

2016 **Ammonites Suciaensis** *Meek.* I.

2017 **Ammonites Vancouverensis** *Meek.*

2018 **Ammonites jugalis** *Gabb.* I.

2020 **Ammonites Whitneyi** *Gabb.*

2021 **Ammonites Stoliczkanus** *Gabb.*

2022 **Ammonites fraternus** *Gabb.*

2028 **Ammonites Pedernalis** *Von Buch.* M.

2029 **Turrilites Oregonensis** *Gabb.* I.

2030 **Ancyloceras Remondii** *Gabb.* I.

2031 **Ancyloceras percostatus** *Gabb.* I.

2032 **Ancyloceras quadratus** *Gabb.* I.

2033 **Ancyloceras? lineatus** *Gabb.*

2035 **Helicancylus æquicostatus** *Gabb.* I.

2036 **Diptychoceras lævis** *Gabb.*

2038 **Baculites occidentalis** *Meek.*

2039 **Baculites inornatus** *Meek.*

2049 **Fusus tumidus** *Gabb.*

2050 **Fusus occidentalis** *Gabb.*

2051 **Fusus Mexicanus** *Gabb.* M.

2052 **Neptunea (Tritonofusus) cretacea** *Gabb.*

2053 **Neptunea mucronata** *Gabb.*

2057 **Palæatractus crassus** *Gabb.*

2058 **Eripachya ponderosa** *Gabb.* I.

2059 **Eripachya perforata** *Gabb.* I.

2060 **Eripachya Hoffmannii** *Gabb.* I.

2065 **Surcula præattenuata** *Gabb.*

2066 **Surcula sinuata** *Gabb.* I.

2067 Surcula inconspicua *Gabb.*

2068 Surcula Claytonensis *Gabb.* I.

2069 Surcula raricosta *Gabb.* I.

2070 Heteroterma trochoidea *Gabb.*

2071 Bela clathrata *Gabb.*

2073 Cordiera mitræformis *Gabb.*

2077 Tritonium Californicum *Gabb.*

2078 T. (Trachytriton) Diegoensis *Gabb.* I.

2079 T. (Trachytriton) Tejonensis *Gabb*

2080 T. (Trachytriton) fusiforme *Gabb.*

2081 Brachysphingus liratus *Gabb.* I.

2082 Brachysphingus sinuatus *Gabb.*

2083 Bullia (Molopophorus) striata *Gabb.*

2094 Turbinella crassitesta *Gabb.*

2099 **Ficopsis Remondii** *Gabb.* I.

2100 **Ficopsis Hornii** *Gabb.* I.

2101 **Ficopsis Cooperii** *Gabb.* I.

2102 **Urosyca caudata** *Gabb.*

2103 **Sycodes cypræoides** *Gabb.* I.

2109 **Lunatia Pedernalis** *Rœm.* M.

2114 **Neverita globosa** *Gabb.*

2118 **Euspira tabulata** *Gabb.* M.

2119 **Ampullina striata** *Gabb.*

2120 **Terebra Californica** *Gabb.*

2121 **Chemnitzia planulata** *Gabb.* I.

2122 **Chemnitzia zebra** *Gabb.* M.

2123 **Chemnitzia Texana** *Rœm.* M.

2137 **Rimella canalifera** *Gabb.* I.

2138 Rimella simplex *Gabb.* I.

2140 Cypræa (Epona) Mathewsonii *Gabb.*

2141 Tylostoma mutabilis *Gabb.* M.

2142 Anchura falciformis *Gabb.* I.

2143 Anchura angulata *Gabb.* I.

2144 Anchura Californica *Gabb.* I.

2145 Anchura exilis *Gabb.* I.

2146 Anchura transversa *Gabb.*

2147 Anchura carinifera *Gabb.*

2148 Anchura monilifera *Gabb.* M.

2149 Helicaulax bicarinata *Gabb.*

2150 Helicaulax costata *Gabb*

2152 Loxotrema turrita *Gabb.*

2156 Atresius liratus *Gabb.*

2157 **Cerithium Mexicanum** *Brug.* M.

2166 **Turritella Martinezensis** *Gabb.*

2171 **Nerita (Theliostyla) triangulata** *Gabb.*

2173 **Calliostoma radiatum** *Gabb.*

2174 **Ataphrus crassus** *Gabb.*

2176 **Angaria cingulata** *Gabb.* M.

2180 **Margaritella angulata** *Gabb.*

2181 **Dentalium Nanaimoensis** *Meek.*

2187 **Acmæa Tejonensis** *Gabb.*

2193 **Cinulia rectilabrum** *Gabb.*

2195 **Ringinella polita** *Gabb.*

2200 **Actæonella oviformis** *Gabb.*

2211 **Solen (Hypogella) cuneatus** *Gabb.*

2219 Corbula alæformis *Gabb.*

2223 Anatina quadrata *Gabb.*

2224 Thracia? occidentalis *Meek.*

2225 Thracia? subtruncata *Meek.*

2226 Pholadomya subelongata *Meek.*

2229 Pholadomya Oregonensis *Gabb.*

2230 Pholadomya Sonorensis *Gabb.* M

2231 Goniomya borealis *Meek.*

2232 Pleuromya papyracea *Gabb.*

2233 Arcomya undulata *Gabb.*

2234 Homomya concentrica *Gabb.* I.

2238 Cymbophora Ashburnerii *Gabb.* I.

2241 Asaphis multicostata *Gabb.*

2255 Tellina æqualis *Gabb.*

2256 **Tellina undulifera** *Gabb.*

2258 **Donax latus** *Gabb.*

2262 **Venus æquilateralis** *Gabb.*

2271 **Meretrix Californica** *Con.*

2272 **Meretrix? fragilis** *Gabb.*

2273 **Caryatis nitida** *Gabb.* I.

2274 **Tapes Hilgardi** *Shum.* M.

2276 **Dosinia tenuis** *Meek.*

2283 **Thetis? elongata** *Gabb.*

2285 **Diodus tenuis** *Gabb.* I.

2288 **Cardium scitulum** *Meek.*

2289 **C. (Lævicardium) linteum** *Con.*

2291 **C. (Protocardium) translucidum** *Gabb.* M.

2292 **C. (Protocardium) granuliferum** *Gabb.*

2293 C. (Granocardium) sabulosum *Gabb.* M.

2296 Cardita alticosta *Gabb.* M.

2297 Clinocolus dubius *Gabb.* I.

2299 Lucina postice-radiata *Gabb.* I.

2311 Crassatella compacta *Gabb.*

2314 Unio Hubbardii *Gabb.*

2318 Mytilus quadratus *Gabb.* I.

2322 Modiola major *Gabb.*

2325 Stalagmium concentricum *Gabb.* I.

2327 Meleagrina antiqua *Gabb*

2328 Inoceramus Elliotti *Gabb.*

2329 Inoceramus Whitneyi *Gabb.*

2330 Inoceramus subundatus *Meek.*

2331 Aucella Piochii *Gabb.* I.

2337 **Trigonia Mooreana** *Gabb.* M.

2338 **Trigonia æquicostata** *Gabb.* I.

2339 **Remondia furcata** *Gabb.* M.

2347 **Arca Vancouverensis** *Meek.*

2349 **Cucullæa inermis** *Gabb.* M.

2353 **Nucula Traskana** *Meek.*

2354 **Nucula solitaria** *Gabb.*

2355 **Nucula (Acila) truncata** *Gabb.* I.

2356 **Leda Gabbi** *Con.* I.

2362 **Pecten Martinezensis** *Gabb.*

2363 **Pecten complexicosta** *Gabb.*

2364 **Pecten interradiatus** *Gabb.*

2365 **Neithea grandicosta** *Gabb.*

2368 **Lima Shastaensis** *Gabb.*

2369 Lima multiradiata *Gabb.*

2372 Anomia Vancouverensis *Gabb.*

2376 Ostrea Idriaensis *Gabb.*

2377 Ostrea appressa *Gabb.*

2379 Gryphæa mucronata *Gabb.* M.

2381 Exogyra plicata *Lam.* M.

2383 Rhynchonella Whitneyi *Gabb.* I.

II. CRUSTACEA.

2385 Callianassa Stimpsonii *Gabb.*

III. RADIATA.

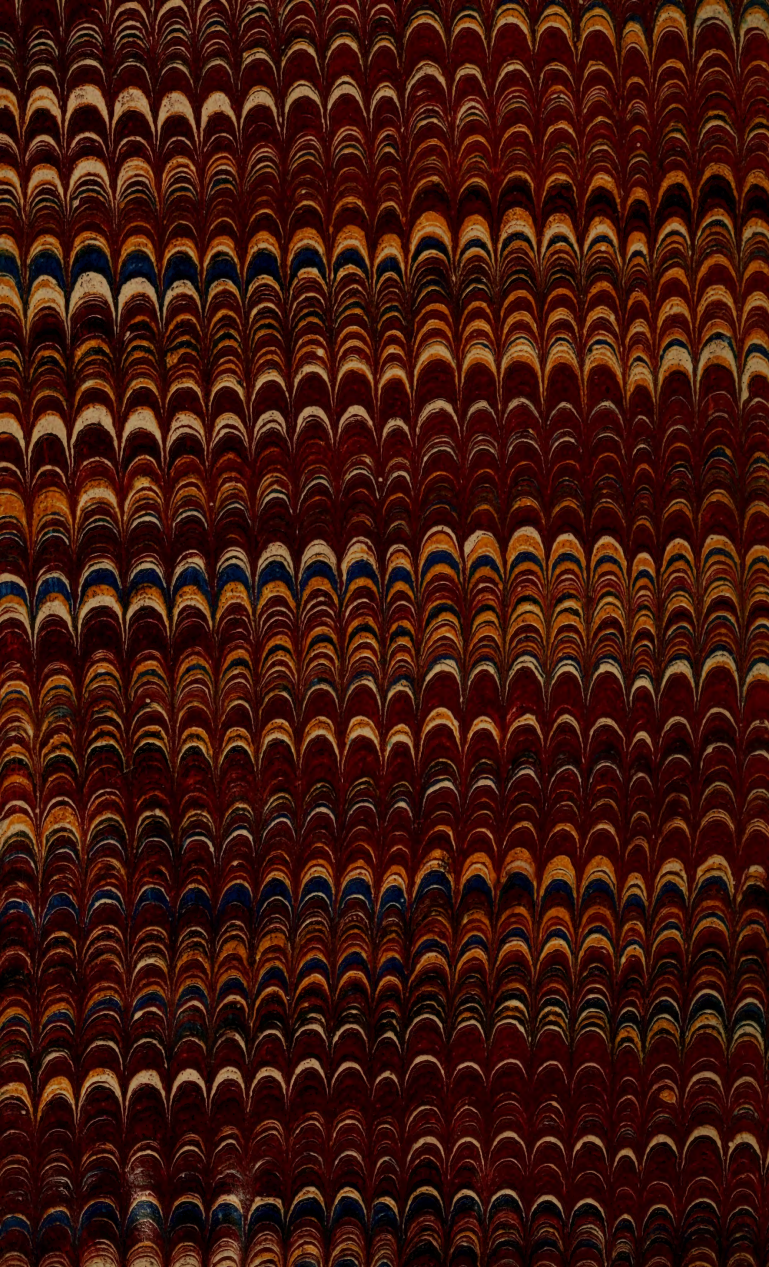
2389 Smilotrochus? curtus *Gabb.*

2390 Pyrina Parryi *Hall.* M.

2391 Cyphosoma Texanum *Rœm.* M.

2392 Turbinolia? Texana *Con.* M.

Carded



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